

**NATURAL RESOURCES CONSERVATION SERVICE  
FIELD OFFICE TECHNICAL GUIDE (FOTG) SECTION II  
WASTE DISPOSAL INTERPRETATIONS**

**SENSITIVE SOIL FEATURES FOR NUTRIENT MANAGEMENT**

Commercial fertilizers or manure applications onto certain soils must be carefully planned. The physical properties or landscape positions of those soils create potential for 1) leaching of nutrients downward beyond the root zone or 2) movement of nutrients towards surface waters. Soils sensitive to nutrient applications include those located in flood plains, coarse textured soils that allow water and soluble nutrients to move rapidly through them; soils only a few feet in thickness when underlain by fractured bedrock or high water tables; and soils located on hillsides containing slopes greater than 6 %.

The following table contains soil mapping units having one or more of the above listed features. Soil mapping units not containing these features are not shown on the table. Soil Map units have been listed if they are:

Frequently Flooded (**FREQ**) - Flood 50 times or more in 100 years.

The Surface Soil Layer is considered Coarse Textured – sand (**S**), loamy sand (**LS**), loamy coarse sand (**LCOS**), fine sand (**FS**), loamy fine sand (**LFS**), loamy very fine sand (**LVFS**), coarse sand (**COS**), and very fine sand (**VFS**) or any of these soils with gravelly (**GR**) modifiers.

Bedrock is (**40**) or fewer inches below the soil surface.

Seasonal High Water Table is (**within 2**) feet of the soil surface or is above (-) the soil surface.

Slope steepness is (**greater than 6**) percent on all or portions of the map unit.

NRCS Conservation Practice Standard Nutrient Management (590) discusses nutrient management practices to use when encountering sensitive soils.

Nutrient Management Planning Software developed by NRCS-Minnesota and the Minnesota Extension Service also lists nutrient management practices to use when encountering a sensitive soil.

**NOTE:** Many sandy loams, coarse sandy loams and fine sandy loams are listed on the “sensitive soil tables” because of properties other than soil texture. However, those and other sandy loam mapping units not listed on the sensitive soils tables may also, on a site-specific basis, be susceptible to leaching because of surface soil texture. Those additional sandy loam soils can be located at the following web site:

<http://www.mn.nrcs.usda.gov/soils/ken/leech/stateSL.pdf>